SYSTEMS AND METHODS FOR PROVIDING AUTOMATIC

3D LESION SEGMENTATION AND MEASUREMENTS

Abstract of the Disclosure

Systems and methods are provided for automatic 3D segmentation of abnormal

5   anatomical structures such as colonic polyps, aneurisms or lung nodules, etc., in 3D

medical imaging applications. For example, systems and methods for 3D lesion

segmentation implement a centroid-based coordinate transformation (e.g., spherical

transformation, ellipsoidal transformation, etc.) to transform a 3D surface of the lesion

from an original volume space into, e.g., a spherical or ellipsoidal coordinate space,

10   followed by interpolation of the transformed lesion surface to enable accurate

determination of a boundary between a lesion and surrounding normal structures.